

W. T. WOOD.

AUTOMATIC LAMP EXTINGUISHER.

No. 189,826.

Patented April 17, 1877.

Fig. 1.

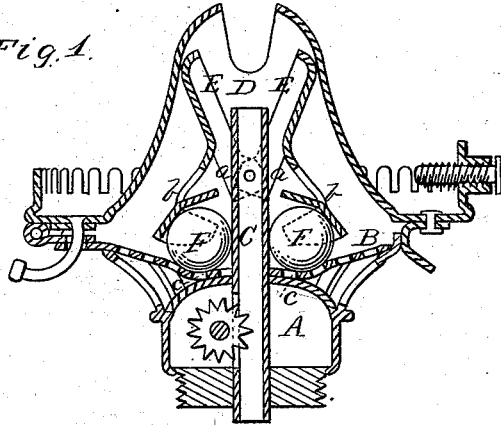


Fig. 2.

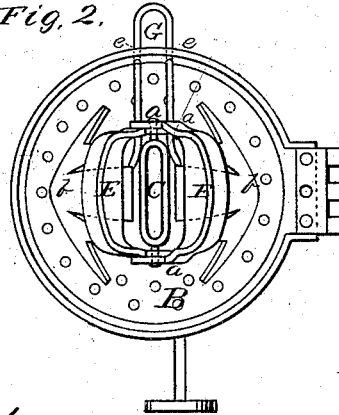


Fig. 3.

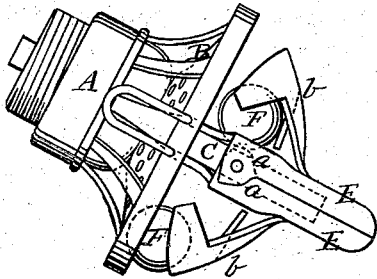
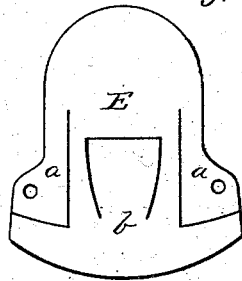


Fig. 4.



WITNESSES

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WILLIAM T. WOOD, OF MOUNT JULIET, TENNESSEE.

IMPROVEMENT IN AUTOMATIC LAMP-EXTINGUISHERS.

Specification forming part of Letters Patent No. 189,826, dated April 17, 1877; application filed December 16, 1876.

To all whom it may concern:

Be it known that I, WILLIAM T. WOOD, of Mount Juliet, in the county of Wilson and State of Tennessee, have invented a new and valuable Improvement in Automatic Lamp-Extinguishers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked

Figure 1 of the drawings is a representation of a vertical central section of this invention. Fig. 2 is a top view. Fig. 3 is a side view, and Fig. 4 is a detail.

This invention has relation to lamp-extinguishers; and it consists in the construction and novel arrangement of the pivoted caps, having their lower ends extended near the floor of the burner, and spread to keep, between said lower ends or guards and the wick-tube, loose balls, by the action of which, when the lamp is tipped in any direction, the caps are operated to extinguish the flame, as herein-after shown and described.

In the accompanying drawings, the letter A designates the body of the burner, having a perforated or ventilated floor, B, and wick-tube C, constructed in any ordinary manner, and provided with the usual flame cap or cone D. E E represent the extinguishing-caps, which may be formed from sheet-metal blanks, of the shape indicated in Fig. 4 of the drawings, or otherwise made to provide lateral pivot-arms *a* and extensions *b* near the burner-floor. These extensions are spread laterally, and curved around toward the wick-tube, to form, in connection therewith, inclosures for the reception of the actuating-balls F, which rest upon the burner-floor, and, when the lamp is in the upright position, are steadied against the wick-tube, or otherwise, by means of depressions *c* in the burner-floor, which is made concave or shelving toward the same.

The pivot-arms *a* are advanced in position, so that the weight of the caps is in rear, and they will fall open, consequently, when the lamp is upright, sufficiently far to be entirely

out of the way of the flame. At the same time the balls will rest in their seats near the wick-tube, the guards in the construction illustrated resting against them in a somewhat closer manner, the movable caps thus forming a draft-chamber near the wick-tube, which serves to keep up a central current, and prevent undue heating of the chamber within the flame-cone.

Draft-openings may be made in the extensions or guards *b*, to facilitate the admission of air to the wick.

G indicates a double-branched lever, which is inserted through perforations *e* in the flange of the burner, and is designed to engage, by its branches, with the under edges of the lateral arms *a* of the caps, said branches passing on each side of the wick-tube.

By pressing upon the projecting loop or extension of this lever outside of the burner-flange, the caps will be brought together, and the flame instantly extinguished.

The same result will follow if the lamp be overset or tipped in any direction. In this case the balls, being displaced from their seats in the burner-floor, will push the guards *b* outward, and thereby bring the caps over the burning wick.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a lamp-burner, the extinguishing-caps E, having the extension-guards *b* near the burner-floor, curved or bent laterally, to form, with the wick-tube, inclosures for the actuating-balls F, substantially as specified.

2. The combination of the double-branched lever G with the caps E, having pivot-arms *a* and the extension-guards *b*, said lever passing on each side of the wick-tube, and engaging under the pivot-arms, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM THOMAS WOOD.

Witnesses:

P. B. LANE,
ANDREW W. LIGON.